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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,171	12/21/2001	Agapios K. Agapiou	1999U024D1.US	9429
25959 7590 04/09/2007 UNIVATION TECHNOLOGIES LLC 5555 SAN FELIPE, SUITE 1950 HOUSTON, TX 77056			EXAMINER MCDONOUGH, JAMES E	
			ART UNIT	PAPER NUMBER
			1755	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/09/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,171	<b>Applicant(s)</b> AGAPIOU ET AL.	
	<b>Examiner</b> James E. McDonough	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10,14-22 and 24-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-10, 14-22, and 24-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

(1) Applicant's arguments, see page 16, paragraph 2 1-4, filed 2/14/2007, with respect to claims 1, 3, 5-10, 14-22, and 24-35 have been fully considered and are persuasive. The rejections have been withdrawn.

### **Original Rejection**

(2) 4. Claims 1, 3, 5-10, 14-22 and 24-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Razavi I or II as cited in and for the reasons of record given in paragraph 4 of the previous Office action.

(3) 5. Claims 1, 3, 5-10, 14-22 and 24-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uwai as cited in and for the reasons of record given in paragraph 5 of the previous Office action.

### **Response to Arguments**

(4) Applicants argue that neither of the Razavi references teaches heating of the metallocene with an activator. This argument is found to be not persuasive because the Razavi references clearly teach a metallocene, an activator (alumoxane), and a support that are combined while heating (see abstract).

(5) Applicants argue that neither of the Razavi references, disclose the temperature that the support is combined with the metallocene/activator. This is found

Art Unit: 1755

to be not persuasive because, Razavi teaches heating from 85-110° C, where the instant claims teach heating from 30-75° C. However, on page 16, lines 8-9 of the specification it teaches that the carrier is most preferably heated from 85-100° C. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the parameters of the catalyst such as the temperature to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

(6) Applicants argue that the metallocene/activator are combined with the carrier at substantially the same temperature. This is found to be not persuasive because the instant claims do not require this.

(7) Applicants argue that the Uwai reference does not teach that the heated metallocene and activator are combined with a heated carrier at substantially the same temperature as the carrier. This is found to be not persuasive because the Uwai reference does teach mixing a metallocene, an activator, and a carrier at temperature of 85-150° C (see abstract) and, there is no limitation in the current claim set requiring the metallocene/activator and the carrier be at substantially the same temperature. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the parameters of the catalyst such as the

Art Unit: 1755

temperature to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

(8) Applicants argue that the Razavi references teach combining the metallocene and activator at 15-50° C and that none of the instant claims fall within that range. This is found to be not persuasive because, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the parameters of the catalyst such as the temperature to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

(9) Applicants argue that they have submitted evidence showing their invention is superior to that of the prior art and that the examiner is ignoring it. This is found to be not persuasive because, as stated in their affidavit submitted on 2/23/2006 "reaction between metallocenes and methyl alumoxane resulted in unexpected and surprising improvement of reactor fouling and maintenance or improvement in catalyst activity, when compared to no added heat during reaction of the metallocenes and MAO.". However, in the references the metallocenes and the alumoxane is heated. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

Art Unit: 1755

was made to vary the parameters of the catalyst such as the temperature to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Furthermore, the affidavit goes from page 1 to page 3, it appears there may be some additional arguments the applicants would like the examiner to consider but, applicants have left out of the affidavit.

(10) Applicants argue the Uwai reference showing limitations of the specific examples. This is found to be not persuasive because these examples are not commensurate with the whole scope of the reference.

(11) Applicants argue the references do not recognize the "result-effective" capability of the temperature. This is found to be not persuasive because the Razavi references teaches the anti-reactor fouling and high catalytic activity of producing catalyst by heating before mixing and the Uwai reference teaches that the temperature is controlled for each contact with, silica, alumoxane, and metallocene by elevating or lowering between 0-95° C. Therefore, it is not understood how these references do not recognize the "result-effective" capability of the temperature.

**(12) THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1755

(13) A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

(14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to James E. McDonough whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

(15) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

(16) Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEM 4/2/2007

*Aileen Felton*  
AILEEN FELTON  
PRIMARY EXAMINER